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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,866	07/22/2003	Yoshihiro Kato	010986.52582US	6399

23911 7590 06/26/2007  
CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER
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LUND, JEFFRIE ROBERT

ART UNIT	PAPER NUMBER
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1763

MAIL DATE	DELIVERY MODE
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06/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/623,866</p>	<p><b>Applicant(s)</b> KATO ET AL.</p>	
	<p><b>Examiner</b> Jeffrie R. Lund</p>	<p><b>Art Unit</b> 1763</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 11 May 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

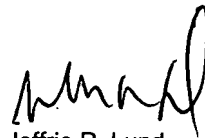
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-3, 5, 7, 8, 10-12 and 20-23.  
Claim(s) withdrawn from consideration: 9 and 13-19.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☒ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: Notice of References cited.

  
Jeffrie R. Lund  
Primary Examiner  
Art Unit: 1763

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see arguments, filed May 11, 2007, with respect to Park, KR 2003-001624 have been fully considered and are persuasive. The 102 and 103 rejections of claims 1-3, 5, 7, 8, 10-12, and 20-23 have been withdrawn.

2. The Examiner recommends amending claims 1 and 21 in the following manner:

1. (Currently Amended) A process system comprising:

a chamber;

a supply plate which has a plurality of gas holes and supplies a process gas into said chamber through said gas holes;

a first diffusion portion located in a first disk which diffuses said gas in a direction approximately parallel to a major surface of said supply plate; and

a second diffusion portion which leads said gas diffused by said first diffusion portion to said gas holes, said second diffusion portion comprised of a ~~disk-like member~~ a second disk having a groove formed in one side thereof, said groove having through holes formed therein, wherein said second diffusion portion is placed over said supply plate to form a hollow portion between said ~~disk-like member~~ second disk and said supply plate such that said gas can be supplied from said first diffusion portion to said hollow portion; and

said process system further comprising a partition member in said hollow portion which separates said hollow portion into a center area and an end area, and a gas supply portion comprising mutually independent gas flow passages, wherein a first gas

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flow passage passes through said first disk and said second disk, and supplies said gas via first through holes exclusively to said center area of the supply plate, and a second gas flow passage supplies said gas that is diffused by said first diffusion portion via second through holes and said second diffusion portion exclusively to said end area of the supply plate, wherein the gas flow rates in the mutually independent gas flow passages are independently controlled, the first gas flows from the center area of the hollow portion through the supply plate to a center area of the process chamber, and the second gas flows from the end area of the hollow portion through the supply plate to an end area of the process chamber such that the gases do not mix prior to entering the process chamber, and first and second gas flow passages are separate.

21. (Currently Amended) A process system comprising:

a chamber;

a supply plate which has a plurality of gas holes and supplies a process gas into said chamber through said gas holes;

a first diffusion portion located in a first disk which diffuses said gas in a direction approximately parallel to a major surface of said supply plate; and

a second diffusion portion located in a second disk which leads said gas diffused by said first diffusion portion to said gas holes((,));

~~wherein said first diffusion portion and said second diffusion portion comprise mutually independent gas flow passages~~, wherein a first independent gas flow passage supplies said process gas only into a center area of said chamber via first gas holes, and a second independent gas flow passage supplies said process gas only into an end

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area of said chamber via said first diffusion portion, second gas holes, and said second diffusion portion; wherein the first independent gas flow passage and the second independent gas flow passage are each formed in said first disk and in said second disk and the process gas in the first independent gas flow passage and the process gas in the second independent gas flow passage do not mix before flowing into said chamber.

These amendments will overcome the 112 rejections of record.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. If the Applicant amends claims 1 and 21 as indicated above, the Examiner will issue a non-final office action rejecting the claims under 103 in view of Okase, US Patent 5,884,009, and a patent showing a showerhead made of multiple plates such as Watanabe et al, US Patent Application Publication 2002/0005442 A1, Fujikawa et al, US Patent 5,595,606, or Drage, US Patent 4,590,042.

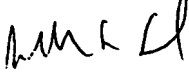
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrie R. Lund whose telephone number is (571) 272-1437. The examiner can normally be reached on Monday-Thursday (10:00 am - 9:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jeffrie R. Lund  
Primary Examiner  
Art Unit 1763

JRL  
6/20/07